

Remarks

Claims 1, 2, 26, and 27 were the subject of the office action dated April 4, 2006. Claims 38-40 are added by this response. Basis for claims 39 and 40 can be found in paragraph 91 and Example 13, for example.

The cross-reference section has been amended. SEQ ID NO:7 was first disclosed in U.S. Serial Number 07/693,018, filed May 3, 1991.

The applicants respectfully traverse the rejection of claims 1 and 20 for lacking an adequate written description. Attached are two expert declarations under 37 CFR 1.132.

Dr. Ken Narva, an inventor on the subject application, explains that the subject 52A1 gene (SEQ ID NO:7) was obtained by hybridization procedures as described in Example 5 of the specification. Recombinant phage containing the 52A1 gene (in a *Sau3A* insert) were plated onto *E. coli* cells, plaques were screened by hybridization, and hybridizing phage were plaque-purified and used to infect liquid cultures of *E. coli* cells for "...isolation of phage DNA by standard procedures (Maniatis et al.)." As further explained by Dr. Narva, the full citation of Maniatis *et al.* for "isolation of phage DNA by standard procedures" is provided in Example 7. As Dr. Narva further explains, the actual procedures used for these hybridization conditions were as described on pages 326-328 of Maniatis in the section entitled "Hybridization to Nitrocellulose Filters Containing Replicas of Bacteriophage Plaques or Bacterial Colonies," particularly in Step 7 on page 327.

Dr. Merlo explains that if one skilled in the art were to read the subject specification, including Example 5, one would turn to pages 326-328 of the cited Maniatis text to determine the hybridization conditions that were used for the hybridization procedures described in the specification.

In light of the foregoing, it should be clear that the hybridization conditions specified in the claims are now properly incorporated by reference and are at least adequately described in

the specification. Thus, the withdrawal of this rejection for lack of this written description rejection is respectfully requested.

The applicants respectfully traverse the rejection of claims 1 and 20 for lacking enablement. Attached is a page from the Crickmore *et al.* website showing the existence of an allele (Cry6Aa2) of the subject 52A1 (Cry6Aa1). Also attached is the GENBANK entry for this toxin. Thus, it should be clear that genes (and related toxins) that hybridize with the exemplified sequence can readily be found by those skilled in the art as far away as China, for example.

Furthermore, the specification provides sample hybridization conditions, as discussed above.

Still further, both experts attest that with the subject gene (SEQ ID NO:7) and toxin in hand, one skilled in the art could readily use related hybridization probes to screen collections of *Bacillus thuringiensis*, for example, for related genes and toxins.

In light of the foregoing, the withdrawal of the rejection for lack of enablement is respectfully requested.

Claims 38-40 should render moot the double-patenting rejections of claims 1, 2, 26, and 27 in light of U.S. Patent Nos. 4849217, 4948734, 5093120, and 5322932, as none of the claims of these patents (and none of these patents) disclose SEQ ID NO:7 or a sequence for the 52A1 toxin of SEQ ID NO:8.

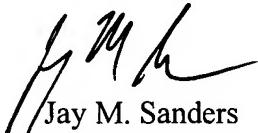
If a claim or claims are otherwise found to be allowable, the applicants will consider submitting a terminal disclaimer in light of U.S. Patent No. 6632792.

The applicants believe that this application is in condition for allowance, and such action is earnestly solicited.

The Assistant Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 and 1.17 as required by this paper to Deposit Account 19-0065.

The applicants invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephonic interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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JMS/ehm

Attachments: Expert Declaration of Dr. Ken Narva under 37 CFR 1.132
Expert Declaration of Dr. Donald Merlo under 37 CFR 1.132
Page from Crickmore *et al.* website
GENBANK entry for 52A1 (Cry6Aa1) toxin
Petition and Fee for Extension of Time